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| 09/972,574      | 10/04/2001  | Masato Sakamoto      | B-4325 619126-5     | 5356             |

7590 11/26/2003  
LADAS & PARRY  
Suite # 2100  
5670 Wilshire Boulevard  
Los Angeles, CA 90036-5679

EXAMINER

PSITOS, ARISTOTELIS M

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2653

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DATE MAILED: 11/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

TS

# Office Action Summary

Application No.

09/972,574

Applicant(s)

SAKAMOTO ET AL.

Examiner

Aristotelis M Psitos

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 04 October 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Drawings***

2. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

This is based on figure 5 in JP 407192416, which as far as the examiner can determine is the same.

***Specification***

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.
5. Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to the independent claims 1 and 11, the recitation of periodic signal producing means is not readily apparent from the remainder of the disclosure (lacking clear support in the specification – see 37 CFR 1.75 (d) (1) requirement). Applicants' cooperation in identifying such is respectfully requested. Furthermore, with respect to the supplying means and function thereof, the examiner is not certain as to what provides such a drive signal. Although the examiner interprets element 7 as the drive means, the supplying means is not clear. Alternatively, if the drive means is element 7, then what is the supplying means? Further elaboration is respectfully requested.

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Dependent claims 2-10 recite desired results; however, no further elements/means are recited to yield such desired results, for instance with respect to claims 5 & 6 what provides for the multiplication? The examiner respectfully requests applicants' cooperation in providing additional elements to yield such desired results.

Furthermore, there is no clear antecedent support for the "partial periodic signal" of claims 7 & 8.

AS FAR AS THE CLAIMS RECITE POSITIVE LIMITATIONS AND INTERPRETED BY THE EXAMINER, THE FOLLOWING REJECTIONS ON THE MERITS ARE MADE.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-10 and 11 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JP 407192416.

As shown/depicted in figures 1-4 therein, this document shows a carriage control circuit, wherein the error control signal is generated by the common te signal generating elements.

With respect to the periodic signal producing means, the examiner interprets such as

a) either the standard pulse generating circuitry(including a master system pulse signal (such as a clock signal) inherently included in such devices for generating the acceleration signal/stepping signal required for the system to move the carriage/head across the radial direction of the disc; or alternatively,

b) element 6-2 in figure 1. Which the examiner concludes is a periodic signal generating means.

If applicants can convince the examiner that the pulse generating circuitry is not inherently provided for in the above noted document/system, then under 103 considerations the examiner would rely upon either Matsumoto et al or Katsuhara et al for teaching in this environment the use of providing for system clock sources (period signal generating means) as required for the systems to operate.

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It would have been obvious to modify the base system of the above noted JP document with such additional clock signal sources from either of the secondary references, motivation is to provide for system clock sources in order to provide drive pulses as required.

c) With respect to the claimed drive signal and supply signal means as recited in the independent claims, these are interpreted as elements 7 and 5 in figure 5 of the JP document as required.

With respect to claim 2, the examiner interprets the signal/clock signal source(s) as analyzed above, such a functional desired result is inherent in any clock signal source.

With respect to claims 3 & 4, the JP document uses a threshold circuit – see Vz in figures 1, and or 2.

With respect to claims 5, 6, 9 & 10, the output C1 as depicted in figure 3 for instance clearly depicts a resultant signal waveform, which flows from the appropriate electronic circuits to yield a multiplication of the two inputs signals.

With respect to claims 7 & 8, the partial periodic signal ability is considered inherently taught/provided for by the above noted JP document – see the circuitry of figure 6 for instance.

### **Double Patenting**

8. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

9. Claims 1-10 and 11 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, and 21 ✓  
→ of copending Application No. 09/972441. Although the conflicting claims are not identical, they are not patentably distinct from each other because the provision of a duty ratio means as the particular element to generate a changed period signal, as opposed to a steady-stead period signal is merely one of degree.

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That is the period signals can either be a steady-state/continuous, or a varying period signal, which are obvious variants thereover.

The dependent claims 2-10 are met by the above-identified dependent claims 3,5,7,9,11,13,15,17 and 19 and fall accordingly.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### **Conclusion**

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The remaining cited references depict various carriage control circuits in this environment.

**Hard copies of the application files are now separated from this examining corps, hence the examiner can answer no questions that requires a review of the file without sufficient lead-time.**

**Any inquiries concerning missing papers/references, etc. must be directed to Group 2600 Customer Services at (703) 306-0377.**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aristotelis M Psitos whose telephone number is (703) 308-1598. The examiner can normally be reached on M-Thursday 8 - 4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R. Korzuch can be reached on (703) 305-6137. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

Aristotelis M Psitos  
Primary Examiner  
Art Unit 2653



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